

## **CURRICULUM VITAE**

### **Bithas Kostas**

#### **PRESENT POSITION**

Professor of Environmental and Natural Resources Economics, Panteion University, Department of Economic and Regional Development, Athens, Greece

#### **EDUCATION**

Bachelor degree in Economics at the National University of Greece, Athens. Performance “excellent”

Master degree in Regional Development at the Regional Development Institute of Panteion University, Athens. Dissertation: “Environmental Economics. Theory and Application”. Performance “excellent”

Post graduate studies in “Environmental Economics and Decision-making methodologies” at the Free University, Department of Regional and Environmental Economics, Amsterdam; under the supervision of Prof. Peter Nijkamp. Dissertation: “Designing for Sustainable Development with multi-criteria analysis”. The summary of the dissertation is published by the Research-Memorandum 1992-76 December 1992 Serie Research Memoranda, Faculteit der Economische Wetenschappen en Econometrie, Free University, Amsterdam.

Ph D studies at Vrij University, Amsterdam and Panteion University, Athens. Thesis: “Ecologically Sustainable Economic Development. Theory - Modeling”. Performance: “Excellent”.

#### **SCHOLARSHIPS**

- a. From the Greek State Scholarships Foundation for the development of Dissertation Thesis.
- b. From the European Union for postgraduate studies on Environmental Economics.
- c. From the European Union for post doctoral studies in the Environmental Economics.

#### **ACADEMIC EXPERIENCE**

- a. Post PhD Researcher at Free University, Amsterdam.
- b. Lecturer at Aegean University, Department of Environmental Studies.  
Graduate Lessons:  
Environmental Economics  
Real Estate economics  
European Environmental Policy
- c. Lecturer at Panteion University, Department of Economics and Regional Development.  
Graduate Lessons:  
Micro-economic Location Theory  
Transport economics and policy

Environmental Economics and Policy  
Natural Resources, Economics and Management  
Ecological Economics and Sustainable Development  
Post Graduate Lessons:  
Environmental Economics and Policy

- d. Assistant Professor at Panteion University, Department of Economics and Regional Development.

Graduate Lessons:  
Micro-economic Location Theory  
Environmental Economics and Policy  
Natural Resources, Economics and Management  
Ecological Economics and Sustainable Development  
Transport economics and policy  
Post Graduate Lessons:  
Environmental Economics and Policy

- e. Associate Professor at Panteion University, Department of Economics and Regional Development.

Graduate Lessons:  
Micro-economic Location Theory  
Environmental Economics and Policy  
Natural Resources, Economics and Management  
Ecological Economics and Sustainable Development  
Transport economics and policy  
Post Graduate Lessons:  
Environmental Economics and Policy

## **SECTORS OF ACADEMIC SPECIALIZATION**

- Ecologically Sustainable Economic Development
- Ecological and Natural Resources Economics.
- Environmental - Economic simulation models.
- Environmental impact assessment
- Transport Economics
- Transports and Environment
- Decision making and policy evaluation

## **REGULAR REVIEWER ON SCIENTIFIC JOURNALS**

- a. Ecological Economics. Elsevier
- b. Hazardous Materials. Elsevier. Journal of Hazardous Materials
- c. Environment and Water Journal. Elsevier
- d. Sustainable Development. Willey

## **LIST OF “OLD” PUBLICATIONS (1997-2005)**

1. K. Bithas, P. Nijkamp, 1997, “Environmental-Economic Modeling with Semantic Insufficiency and Factual Uncertainty”, Journal of Environmental Systems, vol 25(2) pp. 167-184.

2. K. Bithas, P. Nijkamp and A. Tassopoulos, 1997, "Environmental Impact Assessment by experts in cases of factual uncertainty", *Journal Project Appraisal*, vol 12(2), pp. 70-79.
3. K. Bithas, J. Van de Bergh, 1997, "Models of analysis for Environmental Sustainable Regional Development", *journal TOPOS* 13/97 pp. 3-15.
4. K. Bithas, P. Nijkamp 1997, "Critical Factors for an Effective Multi-modal Freight Transport Network in Europe", *Journal Innovation*, vol.10, no.3, pp. 243-258.
5. D. Papaioanou, G. Kallis, K. Bithas, 2000, "Developing a systemic evaluation framework for economy-environment decisions: the case of the southern-eastern Mediterranean basin", *Journal of Development Planning Literature*, vol. 15, no. 1, pp 73-96.
6. K. Bithas, 2001, "The use of renewable energy resources in Greece", *Int. J. of Environmental Technology and Management*, vol. 1, no. 3, pp. 237-245.
7. K. Bithas, D. Papaioannou, 2001, "Policies of confrontation of atmospheric pollution in Athens and the program Auto Oil. Repercussions and prospects", *journal TOPOS*, vol. 16/2001, pp. 141-146.
8. K. Bithas, D. Papaioanou and M. Banti, 2002, "Policies to cope with air pollution in Europe: the Auto-oil programme in the case of Athens", *Int. J. Environment and pollution*, vol. 18, no 4, pp.346-358.
9. K. Bithas, M. Banti, 2002, "Renewable energy and energy – saving initiatives in Greece: policy and experience, *Int. J. Environment and Pollution*, vol.18, no 6, pp 549-557
10. K. Bithas, 2004, "Sustainable use of water in the cities and in the systems of pricing: The European Experience». *Journal TOPOS* vol. 22-23/2004, pp. 89-105
11. K.Bithas, A. Karagannis, G. Kozirakis and A. Charalampous, 2005, "Indicators of sustainable Development in local level in Greece. Tools of Evaluation and planning". *Journal TOPOS*, vol. 24-25/2005, pp. 61-80.

## LIST OF RECENT PUBLICATIONS (2006- )

1. K. Bithas, 2006. The necessity for environmental taxes for the avoidance of environmental thievery: A note on the paper 'Environmental responsibility versus taxation, *Ecological Economics* 56, pp 159-161.
2. K. Bithas, P. Nijkamp, 2006. Operationalising ecologically sustainable development at the micro level: Pareto optimality and the preservation of biologically crucial levels, *Int. J. of Environment and Sustainable Development* 5 (2), pp 126-146.
3. K. Bithas, M. Christofakis, 2006. Environmentally sustainable cities. Critical review and operational conditions, *Sustainable Development* 14 (3), pp 177-190.

4. K. Bithas, 2006. The Economics of Urban Water Use. Efficient Use and Water Pricing in Europe, *Studies in Regional Science* 36 (2), pp.375-391.
5. K. Bithas, C. Stoforos, 2006. Estimating Urban Residential Water Demand Determinants and Forecasting water demand for Athens Metropolitan Area, 200-2010, *South-Eastern Europe Journal of Economics* 1, pp. 1-13.
6. S. Xenarios, K. Bithas, 2007. Extrapolating the benefits arising from the compliance of urban wastewater systems with the Water Framework Directive, *Desalination Journal* 211, pp. 200–211.
7. K. Bithas, 2008. Tracing Operational conditions for the Ecologically Sustainable Economic Development: the Pareto optimality and the preservation of the biological crucial levels, *Environment Development and Sustainability* 10, pp. 373-390.
8. K. Bithas, 2008. The sustainable Residential Water Use: Sustainability, Efficiency and Social Equity. The European Experience, *Ecological Economics* 68, pp. 221-229.
9. K. Bithas, 2008. The European Policy on Water Use at the Urban level in the context of Water Framework Directive. Effectiveness, Appropriateness and Efficiency, *European Planning Studies* 16 (9), pp.1293-1311.
10. S. Xenarios, K. Bithas, 2009. Welfare Improvisation from the Receiving Waters of Urban Wastewater Systems in the Context of the Water Framework Directive, *Water Resources Management* 23 (5), pp. 981-1000, [Doi:10.1007/s11269-008-9310-4](https://doi.org/10.1007/s11269-008-9310-4).
11. S. Xenarios, K. Bithas, 2009. Valuating the Receiving Waters of Urban Wastewater Systems through a Stakeholder-based Approach, *Water Resources Development* 25 (1), pp. 123-140, [Doi:10.1016/j.desal.2006.02.093](https://doi.org/10.1016/j.desal.2006.02.093).
12. V. Markantonis, K Bithas, 2009. The application of the contingent valuation method in estimating the climate change mitigation and adaptation policies in Greece. An expert-based approach, *Environment, Development and Sustainability* 12 (50), pp. 807-824, [DOI: 10.1007/s10668-009-9225-0](https://doi.org/10.1007/s10668-009-9225-0).
13. K. Bithas, 2011. Sustainability and externalities: Is the internalization of externalities a sufficient condition for sustainability? *Ecological Economics* 70 (10), pp. 1703-1706, [Doi:10.1016/j.ecolecon.2011.05.014](https://doi.org/10.1016/j.ecolecon.2011.05.014).
14. Xenarios, S. and Bithas, K. (2012), The Use of Environmental Policy Instruments for Urban Wastewater Control: Evidence from an International Survey. *Environmental Policy and Governance*. doi: 10.1002/eet.596
15. Bithas, K. and Kalimeris, P. 2013. Re-estimating the decoupling effect: Is there an actual transition towards a less energy-intensive economy? *Energy*, Vol, 51, pp. 78-84. DOI: 10.1016/j.energy.2012.11.033
16. G. Mavromati, K. Bithas, 2013. Ecologically Sustainable Economic Development in Aquatic Ecosystems. From Concepts to Policies. *Sustainable Development* , Vol. 21, No. 1, pp.78-84

17. Mavrommati, G., Bithas, K., Panayiotidis, P.(2013) Operationalizing sustainability in urban coastal systems: A system dynamics analysis. *Water Research*, 47 (20), pp. 7235-7250.
18. Kalimeris, P., Richardson, C., Bithas, K. (2014) A meta-analysis investigation of the direction of the energy-GDP causal relationship: Implications for the growth-degrowth dialogue. *Journal of Cleaner Production*, 67, pp. 1-13

## **BOOKS AND MONOGRAPHS**

1. **“Sustainable Cities and Energy Policies”**. Springer Verlag, Berlin, Heidelberg, 1999. Sustainable cities and energy policies (with Roberta Capello, Peter Nijkamp, Gerard Pepping)
2. **“Sustainable Cities. Theory and Politics”**. Publications Typothito-Gutenberg, Athens, 2001.
3. **“The Economics of the Environmental Protection”**. Publications Typothito -Gutenberg, Athens, 2003.
4. **“Environmental and Natural Resource Economics”**. Publications UEHR, Panteion University Athens, 2011. The book is used as textbook in 13 Greek University Departments.

## **Publications in books with editorial board:**

1. P. Nijkamp and K. Bithas, 1993, “Sustainable Development and Monuments Conservation planning. The case of Olympia”, in the journal “Economics of Conservation” published from International Council of Monuments and Sites (ICOMOS). ISBN 955-613-045-4.
2. K. Bithas, A. Tassopoulos, 1994, “Models of interactions of Natural and Economic system. The use of interdisciplinary knowledge in cases of lack of statistical elements” in “Sciences and Environment in the end of century. Problems and Prospects” published from the National Technical University and the Alternative Publications Athens. ISBN 960-427-024-9.
3. P. Nijkamp and K. Bithas, 1995, “Scenarios for sustainable cultural heritage planning: a case study of Olympia”, in “Planning for our cultural heritage” published from Harry Coccossis and Peter Nijkamp. Avebury. ISBN 1 85972 1788.
4. K. Bithas, P. Nijkamp, 1996, ‘Desirable and Expected Developments in Urban Transport in Europe and Relative Environmental repercussions'. this article was published from journal TOPOS in a special publication entitled ‘Regional Development-Land planning and

Environment, in the frame of United Europe. Athens, 1996. ISBN 960-85743-1-5.

5. K. Bithas, P. Nijkamp, 1997, "Sviluppo sostenibile e conservazione del capitale manufatto/ambientale: il caso del patrimonio monumentale di Olympia", in the book *Le valutazioni per lo sviluppo sostenibile della città e del territorio*, published from L. Fusco Girard and P. Nijkamp, (pp. 319- 337). FrancoAngeli, Milano, Italy.
6. K. Bithas, P.Nijkamp, 1999, "Success and Failure Factors for Multi-modal Transport Policy in Europe", in the book *New Contributions to Transportation Analysis in Europe*, published from M.Beuthe and P. Nijkamp, Ashgate, Aldershot.
7. K. Bithas, M. Banti, 2003, "Environmental Sustainable Cities Significances and frame of evaluation", in the book "Space and Environment" , TOPOS, Athens
8. K. Bithas, 2005, Indicators of Sustainable development for cities - The subject of Energy, in the book "Scientific Studies to honor of Professor Nikos I. Konsolas", Publication: Panteion University of Social and Political, Athens

**Other scientific publications:**

1. K. Bithas, P. Nijkamp, 1992, "Sustainable Development and Monument Conservation Planning a case study on Olympia", *Serie Research Memoranda*, 1992, vol. 76. Vrije Universiteit, Amsterdam.
2. K. Bithas, P. Nijkamp, A. Tassopoulos, 1996, "Environmental Impact Assessment under Scientific and Informational Uncertainty". Discussion paper, 1996 – 94/5, Tinbergen Institute, Amsterdam.
3. K. Bithas, P. Nijkamp, 1996, "Environmental-Economic Modeling with Semantic Insufficiency and Factual Uncertainty". *Reprint Series*, vol. 3-746, Tinbergen Institute, Amsterdam, 1996.
4. K. Bithas, P. Nijkamp, 1997 "Decisive Conditions for an Effective and Efficient Multi-Modal Freight Transport Network in Europe". Discussion paper, 1997 – 066/3, Tinbergen Institute, Amsterdam.

**Publications in the proceedings of international conferences with scientific committees:**

1. K. Bithas and A. Tassopoulos, 1992, “Environmental-Economics Models under lack of sufficient statistical data” in the proceedings of First Conference in Mathematics and Information Science (ERMIS) organized by the Greek Mathematical Company, September 1992. ISBN 1105-9737.
2. K. Bithas, A. Tassopoulos, 1995, “Evaluation of environmental repercussions v under lack of sufficient knowledge and satisfactory statistical elements. One alternative methodology”, in the proceedings of 4th conference of Environmental Science and Technology, published from the University of Aegean, Department of Environment, editor: Th. Lekkas. ISSN 1106-5516
3. K. Bithas, P. Nijkamp, 1996, “Environmental-Economic Modeling with Semantic Insufficiency and Factual Uncertainty” proceedings of 21<sup>st</sup> workshop of Applied Econometrics Association with subject Econometrics of Environment and Transdisciplinarity published from A. Baranzini and F. Carlevaro, CUEPE Centre Universitaire d’ Etude des Problemes de l’ Energie, Universite de Geneve, Conches-Geneve (Suisse) and ISEG Instituti Superior de Economia e Gestao, Universidade Tecnica deLisbona, Lisbona (Portugal).
4. P. Getimis, K. Bithas, K. Zikos, 2001, “Key Actors, Institutional Framework and Participatory Procedures, for the sustainable use of water in Attica – Basin”, Proceedings of the 7<sup>th</sup> International Conference on Environmental Science and Technology (GNEST) , University of Aegean, Syros, Sep.2001.
5. S. Xenarios, K. Bithas, 2005, “Evaluating the benefits of water framework Directive in European wastewater systems”, Global Nest, Proceedings of the 9<sup>th</sup> International conference on Environmental Science and Technology, (GNEST) Rhode Island, Greece.
6. Xenarios S., Bithas K., The double dividend of Water Framework Directive (2000/60/EC) in urban wastewater systems: the case of WWTP Psytallia , *10<sup>th</sup> International Conference on Environmental Science and Technology, Global Network for Environmental Science and Technology (GNEST)*, Kos, Greece, 5-7 September 2007
7. S. Xenarios, K. Bithas, Termansen M., 2007 Developing an ecological - economic assessment in receiving waters of wastewater systems due to the Water Framework Directive compliance: the case of Athens wastewater system, 15th Annual Conference of the European Association of Environmental and Resource Economists, Thessaloniki, Greece, 27-30 June 2007.

8. S. Xenarios, K. Bithas, Termansen M., 2007 Defining sustainable welfare levels in the context of the Water Framework Directive for receiving waters of urban wastewater systems, 7th International Conference of the European Society for Ecological Economics, Leipzig, Germany, 5-8 June 2007.
9. K. Bithas, P. Nijkamp, A. Tassopoulos, 1996, "Environmental Impact Assessment under Scientific and Informational Uncertainty" proceedings of workshop "Integrating Environmental Assessment and Socio-economic Appraisal in the Development Process" published from: Development and Project Planning Center, University of Bradford England, και Environmental Impact Assessment Center, University of Manchester England.
10. K. Bithas, D. Zikos, 2005, "Effective water Governance and the Implementation of the Water Framework Directive", conference proceedings in "Multifunctionality of Landscapes", Justus – Liebig University, Giessen Germany.

#### **WORKING PAPERS**

Mavromati G, Bithas K. Richardson C. (2011). Ecologically Sustainable Economic Development in Coastal Ecosystems. Evidence from an International Survey. (Submitted at Sustainability Science, under review)

Bithas K. Mavromati G Reconciling efficiency and sustainability:  
A bioeconomic approach for sustainable development

Bithas K. Mavromati G Biological Integrity as a Prerequisite for Sustainable Development:  
A Bioeconomic Perspective

Bithas K. Markandonis V. Experts' valuation of climate change impacts. Individualistic versus public preferences for crucial environmental functions.

#### **SUPERVISION OF PhD THESIS**

- Xenarios Stefanos, 2009. Title of Dissertation "Evaluation of water receiving bodies of urban waste water treatment units. The European Experience" (completed PhD thesis).
- Markantonis Vasilios, 2010. Title of Dissertation "Economic Evaluation of the Climate Change Impacts: The case study of Floods" (completed PhD thesis).
- Mavromati Georgia , 2011. Title of Dissertation "Ecologically Sustainable Economic Development in Coastal Ecosystems. A Bioeconomic Approach" (completed PhD thesis).
- Kalimeris Panayiotis, 2011- . Title of Dissertation "*Natural resources in the production process. Aggregate scarcity and constraints in the context of Sustainable Development*".
- Maroulis George, 2011- Title of Dissertation: "*Sustainability in aquatic ecosystems. Dynamics of coupled natural human systems for promoting water sustainability science.*"



## MAIN RESEARCH ACTIVITIES THE LAST 10 YEARS

### ACTING AS THE SCIENTIST IN CHARGE

**2003 - 2006:** Scientific in charge for the participation of Panteion University, in the European research project: “*Cost-Effective Development of Urban Wastewater Systems for Water Framework Directive compliance (CD4WC)*” [www.cd4wc.org](http://www.cd4wc.org). The objective of research team of Panteion University was:

- the formulation of conditions for the cost-effective policies for wastewater management
- the application of economic instruments for controlling wastewater pollution sources
- the development of an evaluation framework for the socioeconomic benefits arising from the improvement of receiving waters according to targets of WFD.

Source of funding: EU 5<sup>th</sup> Framework Programme

Start Date: January 2003

End Date: June 2006

The Budget of the grant managed by our organization: 221000 Euros

**2004 - 2006:** Scientific in charge, of the participation of Panteion University, in the research program “*DAMAGE*”.

The objective of the research team of Panteion University was to develop a methodological framework for the estimation of indirect costs caused by natural hazards.

Source of funding: European Regional Development Fund -INTERREG III B/ MEDOCC (75%) and National Contribution (25%)

Start Date: April 2004

End Date: May 2006

The Budget of the grant managed by our organization: 180.000 Euros

**2004 - 2006:** Scientific in charge, for the participation of Panteion University, in the research project: *Feasibility study for the implementation of energy integrated urban planning (EIUP) in ASEAN cities and of applicability of European approaches*. The objective of research team of Panteion University was to develop economic tools for more effective application of renewable sources of energy in regional and local level in the region of S.E. Asia. [www.centric.at](http://www.centric.at)

Source of funding: EC - Energy Asean Facility

Start Date: April 2004

End Date: May 2006

The Budget of the grant managed by our organization: 121.000 EUROS

**2005 - 2007:** Scientific in charge, for the attendance of Panteion University, in the research program “*NAUTISMED*”. [www.nautismed.org](http://www.nautismed.org)

The research team of Panteion University investigated the operational conditions of sustainable development in the coastal ecosystems of Mediterranean with particular interest in the nautical tourist sector.

Source of funding: European Regional Development Fund -INTERREG III B/ MEDOCC (75%) and National Contribution (25%)

Start Date: June 2005

End Date: July 2007

The Budget of the grant managed by our organization: 185.000 Euros

**2007 - 2009:** Scientific in charge , for the attendance of Panteion University, in the research

program *G-FORS Governance for Sustainability*. The program G-FORS investigated the participative process in the decision-making of environmental policy aiming at sustainable development. The program G-FORS proposed a methodological framework for the evaluation of participative processes at local and regional levels. [www.g-fors.eu](http://www.g-fors.eu)

Source of funding: EU 6<sup>th</sup> Framework Programme (100%)

Start Date: February 2006

End Date: January 2009

The Budget of the grant managed by our organization: 220.000 Euros

**2007 - 2008:** Scientific in charge, for the attendance of Panteion University, in the research program SEMSON. The program SEMSON aimed at creating an Observatory of Territorial Planning in South-Eastern Mediterranean. Main component of the observatory was a set of territorial indicators which is compatible with the European standards on of land planning. The indicators concerned the thematic areas of:

- Urban Networks
- Social Accessibility
- Natural heritage
- Environmental conservation

<http://www.uehr.panteion.gr/semson/>

Source of funding: European Regional Development Fund -INTERREG III B/ Archimed (75%) and National Contribution (25%)

Start Date: June 2006

End Date: July 2007

The Budget of the grant managed by our organization: 425.125,8

**2007 - 2008:** Scientific in charge, for the attendance of Panteion University, in the research program SIMCODE. The program investigates the territorial repercussions from the Development of the new transport networks (roads, railways, marine roads and air lines) in the Mediterranean. The complex axes of transports that are created in Mediterranean recommending the cooperation of The geography of Mediterranean lends special characteristics in the complex axes of transports. SIMCODE investigates and evaluates the territorial repercussions of complex - multileveled figurative infrastructures. <http://estia.arch.auth.gr/simcode>

Source of funding: European Regional Development Fund -INTERREG III B/ Archimed (75%) and National Contribution (25%)

Start Date: June 2006

End Date: September 2007

The Budget of the grant managed by our organization: 210.000 Euros

#### **ACTING AS RESEARCHER**

**1997 - 2001:** Researcher at the European Research Program “*METRON, Metropolitan Cities and Sustainable Use of Water*”. Number of Contract: ENV4-CT97-0565. METRON was carried out by the University of Aegean. My attendance was focused on water pricing modes and especially on the use of prices as an instrument that promotes the targets of sustainability, efficiency and social equity.

Source of funding: EU 4<sup>th</sup> Framework Programme (100%)

Start Date: June 1997

End Date: July 2001

The Budget of the grant managed by our organization: 210.000 Euros

**PROFESSIONAL SOCIETY MEMBERSHIPS**

- a. Member of scientific Research Network NECTAR. The network focuses on transport economics and policy.
- b. Member of research team COST (328). This team is an initiative of European Committee aiming at shaping of future socioeconomic research frame that will be financed by the committee.
- c. Member of European Society for Ecological Economics.
- d. Member of scientific research network STELLA that has as an objective the conduct of social research in the field of transports.